

The Ford Green Roof – 10 Years and Growing Strong

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Green Roof Maintenance

- Varies with type of green roof
- Very important in first year
- Maintenance needs diminish with roof age
- Not a major expense

Green Roof Options

- The Ford roof is an Extensive System
- It has a thin profile and is light weight
- Some systems are Intensive
- They are over six inches in depth and require more building support and maintenance

Needs Vary With Roof Type

- Intensive roofs have the most concerns
- Roofs grown “in place” are subject to weed growth and erosion
- Extensive roofs are shallow and don’t allow weeds to take hold

Green Roof Types

EXTENSIVE



INTENSIVE



Intensive Roofs



Extensive Roofs



Roofs Planted in Place



Preplanted Roof Mats



Ford System Components

- Root resistant membrane layer over roof
- Drainage layer of plastic spiral material
- Fleece-like, water absorbent layer
- Substrate layer comprised of shale, sand, compost, peat and dolomite
- Fifteen varieties of sedum plants

Schematic of Ford Green Roof Assembly

FORD ROUGE CENTER LIVING ROOF DESIGN

Sedum plants

Trap dust, absorb carbon dioxide, release oxygen and create habitat

Vegetation blanket

A semi-organic material containing shale, sand, peat, compost and dolomite

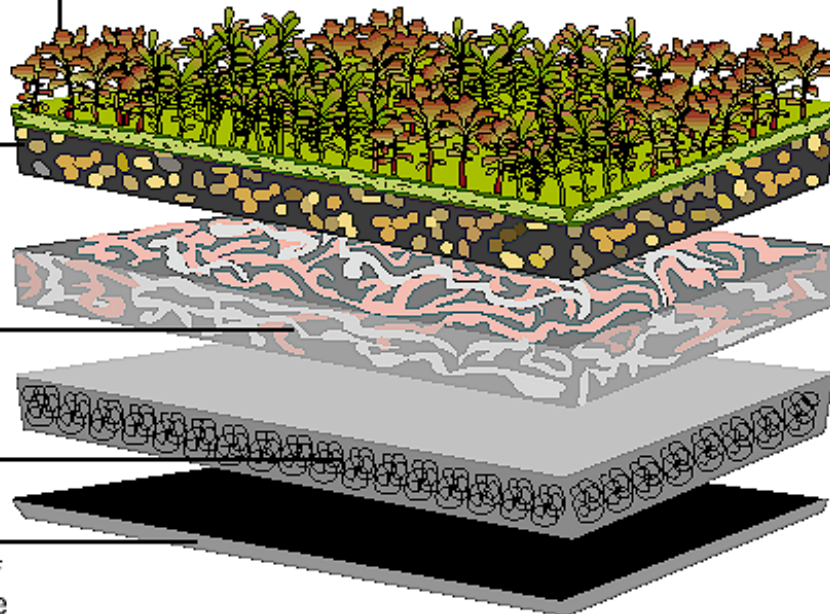
Fleece

A felt-like absorbent mat of mineral wool that holds water

Drainage layer

Root-resistant membrane

Protects the underlying roof from water and root damage



2.5" to 3"

Ford Roof Maintenance

- Irrigation as needed
- Annual fertilizer application
- Spring weeding and cleanup
- No mowing required

Spray Irrigation



Drip Irrigation



Yearly Fertilizer Application

the Sanctuary
with BCMU

16-0-4 Turf & Ornamental Fertilizer


Sanctuary 16-0-4 Turf & Ornamental Fertilizer with BCMU provides a cost-effective fertility approach that combines the nutrient benefits of BCMU and the nutritional aspects of Sanctuary organic ingredients. This product promotes microbial life in tired soils to improve agronomic performance.

DIRECTIONS FOR GOLF
Tees Program
Sanctuary provides a slow even feed with excellent color that promotes outstanding recovery and rooting.
• Maintenance Rate is 3 Bu/M for Divot Recovery
• After Aeration Rate is 6 Bu/M for Rooting & Recovery

Fairway Programs
Residual Color & Growth Program: Sanctuary provides outstanding residual color and growth. For 10 to 12 weeks, the maintenance rate is 5 Bu/M or 4 bags/A on a 3 month interval.
Stress Management Program: Sanctuary aids with disease and stress management programs. For best results during periods of high stress or disease pressure, the applied rate is 2.5 Bu/M every 6 weeks. This program will complement your fungicide products by enhancing microbial diversity.

DIRECTIONS FOR LAWN CARE
Spring Program: Sanctuary applied in the spring provides outstanding residual color and slow even growth. The product can be applied at the rate of 5.5 Bu/M.
Summer Program: Sanctuary applied in the spring provides outstanding residual color and slow even growth. The product can be applied at the rate of 3 Bu/M.
Fall Program: Sanctuary applied in the spring provides outstanding residual color and slow even growth. The product can be applied at the rate of 3 Bu/M.

Total Digestible Nutrient Value (TDN)



16-0-4 TDN Value = 48-50

Guaranteed Analysis

Total Nitrogen (N)	16.0%
0.5% Ammoniacal Nitrogen	
9.5% Water Soluble Nitrogen	
6.0% Water Insoluble Nitrogen*	
Soluble Potash (K ₂ O)	4.0%
Calcium (Ca)	1.0%
Iron (Fe)	1.0%
1.0% Water Soluble Iron	

Derived from Feather Meal, Fish Meal, Bone Meal, Soybean Meal, Wheat Midds, Methylene Urea, Ammonium Sulfate, Ferrous Sulfate and Potassium Sulfate.
*6% Slowly available Nitrogen derived from feather meal, fish meal, methylenedurea and dimethylenetriarea.

Spreader Settings

N Rate	Lbs./1000 sq ft	Scotts RS	Lesco	Bags/A
1.00	8.3	Q	K	7.25
0.50	4.2	N	G	3.60
N Rate	Lbs./1000 sq ft	Scotts RS	Lesco	Bags/A
1.00	6.25	M	H	5.5
0.50	3.1	J	D	2.75

TDN Value is the digestible energy derived from the natural ingredients in this product. This energy is released by the native soil microbes which increases their soil activity. This TDN energy value is exclusive to natural ingredients used in this product. The higher the TDN value, the more energy that is in the product. This released energy is the unique agronomic benefits derived from using natural fertilizer products. For example, all traditional fertilizers have a 0 TDN value and 100% nutrient products have around a 30 TDN value.

Warranty
The Sanctuary, Inc. warrants that this product conforms to the analysis in its label. When used in accordance with label directions, under normal conditions, this product is reasonably fit for its intended purpose. Since timing, method of application, weather, plant, and soil conditions, nutrient conditions, and other factors affecting the use of this product are beyond our control, no warranty is given concerning the use of this product contrary to label directions or under conditions which are abnormal or not reasonably foreseeable. The user assumes all risks of any such use.

For information contact: Sanctuary210@bchmbl.com
Information regarding the contents and levels of metals in this product is available on the internet at <http://www.safefood.org/labels.htm>
Not for use in natural crop and food production in California.

BCM U

Distributed By:
The Sanctuary
PO Box 656
Winter Park, CO 80482
#70160-FG

Net Weight
50 lb. (22.7 Kg)

F 1386



Yearly Spring Weeding



No Mowing Required!



Are Green Roofs Sustainable?

- Green roofs in Europe are over 40 years old
- The Ford green roof is 10 years old and growing strong
- The Ford roof has lasted longer at Ford than a couple of installers...

Final Square Installed



Summary

- Green roofs come in several forms
- Maintenance needs vary with the type of roof selected and age
- Irrigation, fertilizing and weeding are the most common maintenance requirements